FINANCIAL PRODUCTS USED IN THE TAX-EXEMPT BOND INDUSTRY

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Objective

The objective of this Article is to discuss various types of financial products used in the tax-exempt bond industry. This Article discusses the structure of such financial products and the reasons why an issuer or investor may enter into one or more transactions involving such structures. Where applicable, this Article discusses the affect a financial product may have on the yield of the underlying bonds.

Other than where such products may directly affect the exclusion of interest on the related tax-exempt bonds, this Article does not discuss the income tax consequences to issuers or holders of, or counterparties to, the financial products.

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SECTION 1

Notional Principal Contracts

Introduction

A notional principal contract is a contract that provides for payments between two parties where the payments are based on a certain principal amount that does not change hands. The payments by each party are based on different rates.

There are many different types of notional principal contracts. In the tax-exempt bond area the most commonly used notional principal contracts are swaps, caps, floors and collars. This section discusses solely those types of notional principal contracts.

Swaps

Introduction

A swap agreement is a contract under which the parties agree to exchange cash flows where the payments by one party are calculated on a different basis than the payments by the other party. The payments are based on the notional principal amount multiplied by some rate (e.g., an interest rate).

The notional principal amount is not the indebtedness of any party to the contract but is solely used as the basis for a party's payment obligation to the other party over the term of the contract.

Swaps can be in the form of interest rate swaps, basis swaps, commodity swaps, equity swaps, leveraged swaps, etc. In the area of tax-exempt bonds, the most commonly used swaps are the interest rate swap, forward swap and swaption.

Purpose

Swaps are generally used to modify the taxpayer's risk of fluctuations in value or cost, in respect of assets or obligations. Thus, swaps are hedging tools.

Interest Rate Swaps

An interest rate swap generally involves a contract under which the parties agree to periodically make payments to each other based on agreed upon interest rates multiplied by the notional principal amount under the contract. For example, one party makes payments based on a fixed interest rate and receives, in exchange, payments based on a floating rate from the other party. The parties to the swap could also agree to make and receive payments based on different types of floating rates.

Each party to the swap is referred to as the counterparty.

Example 1

In 1998, issuer issues bonds having an average maturity of 25 years. The issuer issues bonds that bear interest at a short-term rate that is determined weekly. However, for budgetary purposes, the issuer wants to know its interest expenses on the date of issue. On the date of issue, the issuer enters into an interest rate swap under which the issuer agrees to make payments to the counterparty based on a fixed interest rate and the counterparty agrees to make payments to the issuer based on the interest rate on the bonds.

How it Works

In the above example assume that the principal amount of the bonds is \$10 Million and interest rate on the bonds is based on the *TMBA Weekly Index*. The issuer agrees to pay a fixed rate of 5% on the notional principal amount equal to \$10 Million. The counterparty agrees to pay interest on the notional principal amount at a rate equal to weekly value of the *TMBA Weekly Index*. The interest on the bonds is due on the 1st business day of each calendar month. The periodic payments on the swap are to be made on the 1st business day of each calendar month. The term of the swap is 10 years.

On May 1, 1999, the interest due on the bonds equals \$150,000. The counterparty's obligation under the swap is \$150,000. The issuer's obligation to the counterparty on May 1, 1999, is \$250,000 (i.e., 5% of the notional principal amount divided by ½). Rather than the parties exchanging the two amounts, the issuer will pay the interest on the bonds

in the amount of \$150,000 and will pay the counterparty \$100,000. In other words, the payments are netted.

Why Would Issuer Do This

The question arises that if the issuer is paying fixed interest rate to the counterparty, why would it not issue fixed rate bonds?

- The issuer may find the issuance of the variable rate bonds and the swap transaction financially beneficial if the fixed rate it is paying under the swap is lower than the fixed rate at which it could have issued the bonds.
- If at the time the swap expires the fixed rates are low, the issuer may decide to convert the interest rate on its bonds to a fixed rate.
- If the term of the swap is the same as the term of the bonds and the swap is a qualified hedge under section 1.148-4(h)(4), the issuer can super integrate the hedge and treat the bond issue as a fixed yield issue.
- Even if the issuer cannot super integrate the swap under section 1.148-4(h)(4), the issuer can include the payments under the swap to determine yield on the bonds.

Example 2

Issuer has \$10 Million principal amount of private activity bonds outstanding that bear interest at a fixed rate of 7%. The bonds are not callable until May 1, 2005. The issuer wants to reduce its financing costs. On May 1, 2001, the issuer enters into a swap agreement under which the issuer makes payments to the counterparty based on a variable interest rate (an objective index) and the swap party makes payments to the issuer based on an interest rate of 7%. The swap terminates on May 1, 2005.

Why Would Issuer Do This

The issuer cannot call the bonds before May 1, 2005, and because the bonds are private activity bonds, they cannot be advance refunded. By entering into the swap the issuer has reduced its financing costs without issuing refunding bonds. On May 1, 2005, if the interest rates are lower than 7%, the issuer may issue current refunding bonds.

Even if the swap is an off-market swap (see discussion below), and the issuer has to make a up-front payment to the counterparty, the issuer may determine that notwithstanding the payment, its financing costs have been sufficiently reduced.

At the same time that the issuer enters the swap, the issuer may also enter into a forward agreement with the counterparty (an underwriter) whereby the issuer agrees to issue refunding bonds on May 1, 2005, and sell the refunding bonds to the underwriter. This is not an advance refunding because the new bonds are actually issued within 90 days of the call date of the prior bonds.

Example 3

Issuer has fixed rate bonds that are callable on June 1, 2008. In 2003, the issuer decides that because short-term interest rates have declined considerably, it will advance refund its outstanding bonds with variable rate bonds the interest on which is determined on a weekly basis. The issuer issues advance refunding bonds and enters into a floating-to-fixed rate swap with counterparty. The counterparty makes payments to the issuer at an interest rate that is determined on the same basis as interest rate on the refunding bonds. The issuer makes payments to the counterparty at fixed rate that is less than the fixed rate on the refunded bonds. Assume that the swap is a qualified hedge under section 1.148-4(h)(4) of the regulations.

Why Would Issuer Do This

Under section 1.148-2 of the regulations, the yield on the advance refunding escrow cannot exceed the yield on the refunding bonds by more than 1/1000th of 1 percentage point. Thus, the issuer needs to know the yield on the refunding

bonds on the issue date. By super integrating the swap with the refunding bonds, the issuer can treat the refunding bonds as fixed rate bonds and thus establish an escrow for the refunded bonds that meets the requirements of section 1.148-2 of the regulations. See discussion in Section 3.

Qualified hedging transactions, integration and super integration, and other rules applicable to a tax-exempt bond transaction are discussed in Section 4 of this Article.

Forward Swaps

This is a slight variation on the plain vanilla interest rate swap. This swap begins at a set date in the future and the fixed rate to be paid by a counterparty is determined on the date the swap is executed. The forward swap permits the party paying interest at the fixed rate (generally the issuer) to lock in its interest cost on the debt to be issued in the future. Under this swap, the parties are obligated to enter into the swap at the future date, regardless of the actual interest rate environment on the date the swap becomes effective. Typically, the issuer also enters into a contract to issue variable rate bonds on the same date that the swap goes into effect.

Example

On June 1, 2002, the issuer has private activity bonds outstanding that bear interest at 7.5%. The bonds are callable on August 1, 2003. On that date the outstanding principal amount of the bonds will be \$5 Million. The issuer enters into a forward swap with counterparty where the parties agree that starting August 1, 2003, the issuer will make a periodic payment to the counterparty on the notional principal amount of \$5 Million at a fixed rate of 6%. The counterparty will make periodic payments to the issuer at a rate determined by the *PSA Municipal Bond Index*.

Why Would Issuer Do This

The issuer cannot refund the outstanding bonds on June 1, 2002. The issuer believes that it is likely the long-term rates will go above 6% on August 1, 2003, and thus wants to take advantage of the current lower fixed rates. On August 1, 2003, the issuer will issue variable rate refunding bonds the interest on which is based on the *PSA Municipal Bond Index*.

The proceeds of the refunding bonds will be used to current refund the outstanding bonds. The issuer's obligation under the forward swap is payments to the counterparty in an amount equal to 6% of the notional principal amount. The counterparty will make periodic payments to the issuer at a rate determined by the *PSA Municipal Bond Index*.

Swaptions

In contrast to the forward swap where both parties are obligated to enter into the swap in the future, the swaption provides the non-issuer counterparty the option to enter into the swap with the issuer.

Example

On June 1, 2002, the issuer has private activity bonds outstanding that bear interest at 7.5%. The bonds are callable on August 1, 2003. On that date the outstanding principal amount of the bonds will be \$5 Million. The issuer enters into a swaption with counterparty pursuant to which the counterparty has the option to enter into a swap with the issuer on or within six months after August 1, 2003. The swap will provide that the issuer will make a periodic payment to the counterparty on the notional principal amount of \$5 Million at a fixed rate of 6%. The counterparty will make periodic payments to the issuer at a rate determined by the *PSA Municipal Bond Index*. On June 1, 2002, the counterparty pays the issuer \$X as consideration for providing the option.

Why Would Issuer Do This

The issuer cannot refund the outstanding bonds on June 1, 2002. The issuer believes that it is likely that the long-term rates will go above 6% on August 1, 2003 and thus wants to take advantage of the lower fixed rates. If the counterparty exercises the option, the issuer will be able to current refund the outstanding bonds with the variable rate bonds and also lower its financing costs at 6% interest rate. If the counterparty does not exercise the option, the issuer has received \$X in June 1, 2002.

By purchasing the swaption rather than entering into a forward swap, the counterparty is not obligated to enter into the swap on August 1, 2003. Depending upon the long-term

interest rates on August 1, 2003, the counterparty may or may not exercise its option. For example, if long-term rates are considerably higher than 6%, the counterparty will not exercise the option. On the other hand, if the long-term rates are less than 6%, the counterparty will exercise the option.

At-market Swaps

Generally, the counterparties to a swap do not make any up front payments at the time the swap is executed. This is because each party's obligation is based on current interest rates in the market. Such swaps are referred to as "at-market" swaps.

Off-market Swaps If the parties agree to a rate that is above or below market rate (typically the fixed rate), the swap is referred to as "offmarket" swap. The party benefiting from the variance is generally required to make an up-front payment to the other party. The up-front payment results in adjusting the yield on the swap to the parties to the swap.

> In certain instances, the fixed rate payer may decide to prepay its entire obligation under the swap. Such payment is generally equal to the present value of all the fixed rate payments under the swap.

Termination

A party may terminate a swap by making a payment to the other counterparty. A party receiving payments that are lower than it could receive in the current market, may decide to terminate the swap and also the party making payments that are higher than in the current market may decide to terminate the swap. Having said that, it is important to note that, generally, the party terminating the swap will have to pay a termination fee to the other party. This payment will probably reduce or eliminate any savings.

Offsetting a Swap

A party to a swap can economically close out its position in the swap by entering into a reverse or offsetting swap. Although the original swap remains in place, for purposes of that party, it has no economic significance.

For example, issuer enters into a swap with a counterparty. The bonds are variable rate bonds with interest based on the *JJ Kenny Index*. The issuer receives payments on the notional principal amount at the variable rate and makes payments at 5% to the counterparty. After a few years, the long-term rates increase to 6%. Issuer can enter into a swap with another counterparty where the issuer's obligations are based on the *JJ Kenny Index* and the counterparty's obligations are at 6%.

Caps

Introduction

An interest rate cap is an agreement under which the writer receives a premium (typically paid up front) in exchange for its promise to make payments equal to the excess on each payment date of a floating rate index over a specified fixed rate. The payments are based on a notional principal amount.

How It Works

Issuer issues floating rate bonds the interest on which is determined weekly based on an objective floating index. The principal amount of the bonds is \$10 Million. On the issue date the issuer purchases a cap from Writer and pays a premium of \$X to Writer. Writer agrees that if during any weekly rate period the interest rate on the bonds goes above 4%, Writer will pay to the issuer the excess of the floating rate over 4%, as applied to the notional principal amount. The 4% is called the "strike rate."

On an interest payment date for the bonds, the floating rate for the prior interest period is 4.5%. Writer will pay to the issuer an amount equal to \$50,000 ((4.5% - 4%) x \$10M)¹. If on the interest payment date the floating rate for the prior interest period is 3.9%, Writer pays nothing to the issuer.

Why Would Issuer Do This

The issuer has reduced its risk that floating rates on the bonds will increase substantially. By purchasing the cap the issuer is certain that in no event would it be required to pay interest in excess of 4% on the bonds. This may be preferable to the issuer than issuing fixed rate bonds because the issuer can take advantage of floating rate interest that are generally lower than fixed rates and yet be assured that its interest costs will not go above 4%.

¹ The numbers used in the example are solely for illustration purposes and, for purposes of simplicity, are based on one payment each year. A floating rate bond will generally pay interest more than annually. The actual interest payment amount will therefore depend upon the number of days in the interest period.

Floors

Introduction

Interest rate floor is an agreement under which the writer typically receives an initial premium payment in exchange for its promise to make payments equal to the excess of a specified fixed rate over a floating rate index. The payments relate to a notional principal amount.

How It Works

An issuer has purchased floating rate investments with \$10 Million of the proceeds of its bonds. The issuer believes that it must earn at least 3% on its investments to be able to maintain its expenses. The issuer purchases an interest rate floor from Writer whereby Writer agrees to pay to the issuer the difference between the interest received by the issuer on its investments and 3%, each applied to the notional principal amount. If the interest rate on the investments for a period is 2.5%, Writer will pay to the issuer \$50,000 ((3% - 2.5%)) x \$10 Million)². The strike rate is 3%.

² See footnote 1.

Collars

Introduction

An interest rate collar is a combination of a cap and a floor. The agreement provides that the seller of the cap will make payments to the buyer if the floating interest rate exceeds the strike rate on the cap. The buyer will in turn make a payment to the seller if floating rates go below the strike rate on the floor.

How It Works

Issuer issues floating rate bonds in the principal amount of \$10 Million. It wants to make sure that its interest costs do not exceed 6%. The issuer purchases a cap with a strike rate of 6% and sells a floor with a strike rate of 3%. The entire transaction is called a collar. There is no up front payment on this transaction.

If the interest rate on the bonds for an interest period is 6.5%, the seller of the cap will pay to the issuer \$50,000 ((6.5%-6%) $\times 10 \text{ Million}$)³.

If the interest rate on the bonds is 2.75% for an interest period, the issuer will pay to the floor purchaser \$25,000 ((3%-2.75%) x \$10 Million)⁴.

Why Would Issuer Do This

By entering into the collar, the issuer is assured that its interest costs will not exceed 6%. Although the issuer does not receive a benefit if the floating rates go below 3% (because it has sold a floor to the buyer), it saves on the up front payment on the cap to the buyer. The buyer is hoping that the interest rates will not go above the cap strike rate.

³ See footnote 1.

⁴ See footnote 1.

Counterparty Risk

Generally

The issuer faces the risk that the counterparty will be unable to make the payments under the swap. This is referred to as the counterparty credit risk. For example, if the swap involves short-term variable rate bonds and the counterparty making the periodic variable rate payments goes out of business, the issuer is obligated to pay the variable rate on the bonds. If the variable rates rise above the fixed rate obligation of the issuer under the swap, the issuer may end up paying interest at a rate higher than expected. To address these concerns, the issuer of the bonds will often guarantee the payments under the swap for a fee.

SECTION 2

Options

Introduction An option is a unilateral contract conveying the right but not

the obligation to buy or sell a specific item at a specified price within a specified period of time. If the option purchaser (also referred to as the holder) exercises its option, the seller (also referred to as the writer) of the option has an obligation

to sell or buy the specific item at the specified price.

Consideration The consideration received by the writer of the option is

called the option premium.

Strike Price The strike price is the price at which an option holder may

buy or sell the item specified in the contract.

Positions The writer of the option is said to be in a "short" position and

the holder of the option is said to be in a "long" position.

Expiration Date The last day on which an option can be exercised is termed

the expiration date. If the option has not been exercised prior to the specified expiration date, it expires and ceases to exist.

That is, the option buyer no longer has any rights; and

therefore, the option no longer has any value.

Example Individual A purchases an option to acquire 50 shares of

corporation from Individual <u>B</u> on or before Date 1 at a price of \$X per share. <u>A</u> has the option to purchase the 50 shares but not the obligation. However, if A exercises her option, B

must sell the shares to \underline{A} at \$X per share. If \underline{A} fails to

exercise the option on or before Date 1, the option has lapsed.

Call Option

A purchaser of the call option obtains the right to purchase from the writer of the option a specified item at a specified price on or before a specified date.

How It Works

On February 15, 2002, Individual \underline{A} sells an option to Individual \underline{B} under which \underline{B} has the option to purchase 100 shares of XYZ on or before May 1, 2002. \underline{B} has the option to purchase each share at \$10. In consideration for the call option, \underline{B} pays to \underline{A} \$50. On April 15, 2002, the price of each share of XYZ is \$12.50. \underline{B} believes that this will be the highest price for the shares of XYZ before May 1, 2002. Thus, on April 15, 2002, \underline{B} exercises his call option and purchases 100 shares for \$1000.

The writer/seller of the call option is \underline{A} The purchaser/holder of the call option is \underline{B} The strike price is \$10/share for 100 shares The expiration date is May 1, 2002. The premium for the call option is \$50

If the price of shares of XYZ fall below \$10 between February 15, 2002 and May 1, 2002, \underline{B} will not exercise the call option. If this happens, the option is "out-of-the-money." \underline{B} will allow the option to lapse because \underline{B} can acquire the shares in the market for less money.

If the price of the shares of XYZ go above \$10 between February 15, 2002 and May 1, 2002, the option will be "inthe-money." <u>B</u> will exercise the call option.

In writing the option, \underline{A} is hedging that the price of XYZ shares will fall below \$10/share, whereas, \underline{B} is hedging that the price of XYZ shares will go above \$10/share.

Put Option

A purchaser of the put option obtains the right to sell to the writer of the option a specified item at a specified price on or before a specified date.

How It Works

On February 15, 2002, Individual \underline{A} sells an option to Individual \underline{B} under which \underline{B} has the option to sell to \underline{A} 100 shares of XYZ on or before May 1, 2002. \underline{B} has the option to sell each share at \$10. In consideration for the put option, \underline{B} pays to \underline{A} \$50. On April 15, 2002, the price of each share of XYZ is \$7.50. \underline{B} believes that this will be the lowest price for the shares of XYZ before May 1, 2002. Thus, on April 15, 2002, \underline{B} exercises his put option and sells 100 shares for \$1000.

The writer/seller of the put option is \underline{A} The purchaser/holder of the put option is \underline{B} The strike price is \$10/share for 100 shares The expiration date is May 1, 2002. The premium for the put option is \$50

If the price of shares of XYZ rise above \$10 between February 15, 2002 and May 1, 2002, <u>B</u> will not exercise the put option. If this happens, the option is "out-of-the-money." <u>B</u> will allow the option to lapse because <u>B</u> can sell the shares in the market at a higher price.

If the price of the shares of XYZ fall below \$10 between February 15, 2002 and May 1, 2002, <u>B</u> will exercise the put option. If this happens the option is "in-the-money." <u>B</u> will exercise the option because he will receive \$1000 for shares that are otherwise worth less than that.

In writing the option, \underline{A} is hedging that the price of XYZ shares will rise above \$10/share, whereas, \underline{B} is hedging that the price of XYZ shares will fall below \$10/share.

Termination

By Purchaser

There are four ways by which an option purchaser can terminate its option position.

- 1. Do nothing and allow the call or put option to expire. The purchaser incurs a loss equal to the option premium paid.
- 2. Exercise the option. Upon exercise of the call option, the writer is obligated to sell and the purchaser is obligated to buy the underlying property. Upon exercise of the put option, the purchaser is obligated to sell and the writer is obligated to buy the underlying property.
- 3. Sell the option in the market to a third party. The third party is then the option holder and the original holder's position is terminated.
- 4. Enter into a closing transaction or an offsetting position. The purchaser of the call option closes the option by selling the same option and the purchaser of a put option closes the option by buying the same option.

Subsection 4 can be explained as follows: On February 15, 2002, Individual \underline{A} sells an option to Individual \underline{B} under which \underline{B} has the option to purchase 100 shares of XYZ on or before May 1, 2002. \underline{B} has the option to purchase each share at \$10. In consideration for the call option, \underline{B} pays to \underline{A} \$50. \underline{B} can close the option by writing a call option to \underline{C} for 100 shares of XYZ at \$10 on or before May 1, 2002. \underline{B} receives \$55. \underline{B} cannot close his call option with \underline{A} or let it lapse. This is because if \underline{C} exercises its call option, \underline{B} will more likely than not have to exercise its call option so that it can deliver on \underline{C} 's option.

By Writer

There are four ways that an option writer's obligation can terminate:

- 1. A put or a call option may lapse without being exercised by the purchaser. The writer recognizes income in the amount of the premium received.
- 2. A put or call option is exercised by the purchaser. In case of a call option, the writer must sell the underlying property to the purchaser and in the case of a put option, the writer must buy the underlying property from the purchaser.
- 3. An option writer may enter into a closing transaction or an offsetting position.
- 4. The option writer can purchase the option back from the holder.

Applicability To Tax-exempt Bonds

Example 1

Issuer issues bonds in the principal amount of \$50 Million to acquire a facility. The bonds are issued as variable rate bonds. Issuer deposits \$5 Million of the proceeds of the bonds in the debt service reserve fund and invests the proceeds in investment securities. Issuer writes a put option to <u>A</u>. The option provides that <u>A</u> has the option to put a portfolio of tax-exempt obligations at a yield not less than 5% at a purchase price of \$5 Million. The issuer receives \$500,000 for selling the put option. The option lapses 12 months after it was written.

Why Would Issuer Do This

Although the issuer need not yield restrict the amounts in the reserve fund, it is required to rebate almost all its earnings on the amounts in the reserve fund that are in excess of the bond yield. Issuer desires to maximize its earnings on the reserve fund and not pay rebate. Because the bonds are variable rate bonds, the yield is lower than the yield the issuer can receive on the investments in the reserve fund. Thus, the issuer will

probably have a rebate payment due to the US Treasury. By selling the put option, the issuer gets an up front premium and if the put option is exercised, the issuer will acquire tax-exempt securities that may have a yield in excess of the yield on the bonds. However, because tax-exempt securities are generally not investment property under section 1.148-1 of the regulations, the issuer does not have to rebate the earnings.

If within the option period, the yield on tax-exempt obligations in the market rises above 5%, the price of buying the portfolio in the market will fall (i.e., be less than \$5 Million). Under such situation, \underline{A} will exercise the option and sell the portfolio to issuer for \$5 Million. If the yield on similar tax-exempt obligations falls, the price of buying the 5% portfolio in the market will rise. \underline{A} will not exercise its put option because \underline{A} can sell the same portfolio in the market at a higher price.

Example 2

Issuer has certain outstanding private activity bonds that have a fixed yield of 7%. The yield in the market for similar securities as the bonds is currently 6%. The bonds are not callable until August 1, 2005. On March 5, 2002, the issuer sells to $\underline{\mathbf{A}}$ the option to require the issuer to call the bonds on any date between August 1, 2005 and August 1, 2006 and sell them to $\underline{\mathbf{A}}$. As consideration for the sale the issuer receives \$5 Million.

Why Would Issuer Do This

The issuer cannot refund the bonds at the current lower interest rate market because the bonds are not callable until August 1, 2005. By selling the call option (also referred to as, the "detachable call"), the issuer receives \$5 Million, an amount that is based upon the present value savings it could have received if it could refund the bonds. Additionally, the issuer gets the savings even if the rates were to rise above 7% after the bonds become callable. In this situation, if A exercises the call option, it will require the issuer to call the bonds and sell the bonds to A.

If on or after August 1, 2005, the interest rates on similar tax-exempt obligations fall below 7%, \underline{A} is likely to exercise its call option because it will be able to acquire bonds bearing interest at 7% in an environment when the interest rates are less than that. \underline{A} 's option expires on August 1, 2006 and if \underline{A} lets the option lapse, issuer is free to call the bonds any time after that without any obligation to \underline{A} .

SECTION 3

Qualified Hedging Transactions

Objective This section discusses the effect any payment received or

made by the issuer in connection with the various notional principal contracts discussed in Section 1 and options discussed in Section 2 may have on the yield on the bonds.

Introduction According to Treas. Reg. section 1.148-4(h)(1), payments

made or received by an issuer under a qualified hedge relating to a bond issue are taken into account in calculating yield on

the issue.

Except as otherwise provided in Treas. Reg. sections 1.148-4(h)(4) and (5)(ii)(E), the bonds are treated as variable yield

bonds from the issue date.

Requirements of Qualified Hedges

Introduction Except as otherwise provided below, a qualified hedge is a

contract that satisfies each of the requirements stated below.

Risk Reduction Treas. Reg. section 1.148-4(h)(2)(i)(A) provides that to be a

qualified hedge, the contract must be entered into primarily to modify the issuer's risk of interest rate changes with respect

to the bond.

Examples A floating to fixed rate swap modifies the issuer's risk that

interest rates in the market will increase above a certain fixed

rate.

An interest rate cap protects the issuer from increase in

floating rates above a certain fixed rate.

Special Rule for Fixed Rate Issues

Under Treas. Reg. section 1.148-4(h)(2)(i)(B), if the bond is part of a fixed rate issue (absent the hedge), the contract must be entered into:

- no later than 15 days after the issue date of the issue, OR
- no later than the expiration of another qualified hedge with respect to the bonds of that issue.

Examples

Issuer issues fixed rate bonds on August 1, 2001. It wants to take advantage of lower short-term variable rates in the current market and enters into an interest rate swap on the date of issue. The swap terminates on August 1, 2006. The swap meets the requirements of this rule.

The swap expires on its termination date and on September 5, 2006, the financial officer of the issuer decides that variable rates are low and enters into a new interest rate swap on September 5, 2006. The new swap fails to meet the requirements of this rule because it is entered into more than 15 days after the issue date and later than the expiration of the first swap.

Requirements of Qualified Hedges - continued

No Significant Investment

Element

Treas. Reg. section 1.148-4(h)(2)(ii)(A) provides that the hedge must not contain a significant investment element. The hedge must be "on-market." If the contract for an interest rate swap requires an up-front payment, it contains a significant investment element.

Issuer issues fixed rate bonds and enters into a floating to fixed rate swap. The counterparty pays to the issuer an up front premium that the issuer uses to pay costs of issuance and in return the counterparty agrees to make payments at 6.5%. The 6.5% is below the market rate for a floating to fixed swap. The swap contains a significant investment element.

If the premium to be paid for a cap is to be made as a single up front payment, the contract contains a significant investment element.

Issuer issues floating rate bonds and purchases a cap at the fixed rate of 5%. The issuer pays an up front premium of \$X. The cap has a significant investment element.

An interest rate cap does not contain a significant investment element if all payments to the hedge provider are periodic payments, are made at the same time that the writer would make payments to the issuer and each party's payments are based on the same notional principal amount.

Issuer issues floating rate bonds bearing interest based on an objective index. The issuer purchases a cap from Writer with the strike rate being 5%. The interest on the bonds is payable monthly. The issuer agrees to pay a premium of \$X for the term of the cap. The issuer will pay the premium over the term of the cap rather than up front. The premium will be paid on each interest payment date (monthly) and will be based on the outstanding principal amount of the bonds. If the floating rate on the bonds goes above 5%, on each interest payment date the Writer will pay to the issuer the difference in the floating rate and the strike rate as applied to the

Requirements of Qualified Hedges - continued

outstanding principal amount of the bonds. The cap does not have a significant investment element. See Treas. Reg. section 1.148-4(h)(2)(ii)(B).

Contracts with Off-market Payments

According to Treas. Reg. section 1.148-4(h)(2)(i)(C), if the hedge provider makes a single payment to the issuer in connection with the acquisition of the contract, the issuer may receive such a payment and treat a portion of the contract as a qualified hedge if:

- the hedge provider's payment and the issuer's excess payments made above those it would have made had the contract been on-market are separately identified in a certification of the hedge provider, AND
- the excess payments are NOT included in calculating the yield on the hedged bonds.

Example

Issuer issues fixed rate bonds and enters into a floating to fixed rate swap. The counterparty pays to the issuer a payment up front and the issuer pays the counterparty a premium on each interest payment date. The issuer uses the up front payment to pay costs of issuance. The issuer agrees to pay the counterparty 1% above the *PSA Municipal Bond Index*. The floating rate is above market rate. The counterparty identifies the up front payment and the 1% above the *PSA Municipal Bond Index*. The issuer does not include the 1% over the *PSA Municipal Bond Index* in computing the yield on the bonds.

Parties to the Contract

Treas. Reg. section 1.148-4(h)(2)(iii) requires that the parties to the contract must be unrelated.

Hedged Bonds

Treas. Reg. section 1.148-4(h)(2)(iv) requires that the contract must cover a discrete group of substantially identical bonds. For example, all bonds having the same interest rate,

Requirements of Qualifies Hedges - continued

maturity, and terms. The contract may hedge for all or a pro rata of each interest payment of each bond in the issue.

When there is a qualified hedge relating to a bond issue, the bonds are often referred to as "hedged bonds." Do not confuse this reference with "hedge bonds" described in IRC section 149(g). They have nothing to do with each other.

Interest based Contract

Treas. Reg. section 1.148-4(h)(2)(v) requires that the contract must be interest based

Payments Closely Correspond

Under Treas. Reg. section 1.148-4(h)(2)(vi), the payments received by the issuer must closely correspond in time to the payments being hedged on the hedged bonds or specific payments required to be made under the bond documents.

Example

Issuer issues fixed rate bonds the interest on which is payable on June 1 and November 1. The issuer enters into an interest rate swap whereby the issuer's obligation is based on a floating rate and the counterparty's obligation is based on the fixed rate on the bonds. The periodic payments by each party are to be made on each June 1 and November 1. The payments closely correspond

Identification

Treas. Reg. section 1.148-4(h)(2)(ix) requires the issuer to identify the contract on its books and records not later than three days after the date on which the issuer and the hedge provider enter into the contract.

The identification must specify the hedge provider, the terms of the contract, and the hedged bonds, and must contain sufficient detail to establish that the qualified hedge requirements are satisfied.

The hedge must be noted on the first form relating to the hedged bonds that is filed with the Service. (Form 8038, 8038-T, etc.)

Accounting Rules for Qualified Hedges

General

Under Treas. Reg. section 1.148-4(h)(3)(i), payments made or received by the issuer under a qualified hedge are treated as payments made or received, as appropriate, on the hedged bonds. Accordingly, such payments are taken into account in calculating the yield on the hedged bonds.

The payments are reasonably allocated to the period to which the payments relate.

Payments made or received by the issuer include payments deemed made or received when a contract is terminated or deemed terminated.

Termination Payments

Treas. Reg. section 1.148-4(h)(3)(iv)(A) provides that a termination of a qualified hedge includes any sale or other disposition of the hedge by the issuer. If the issuer acquires an offsetting hedge, then the original hedge is terminated.

A deemed termination occurs if the hedged bonds are redeemed or when the hedge ceases to be a qualified hedge.

An assignment by the hedge provider of its remaining rights and obligations under the hedge to a third party, or a modification of the contract, is treated as a termination with respect to the issuer only if results in a deemed exchange and realization event under IRC section 1001.

Payments

Treas. Reg. section 1.148-4(h)(3)(iv)(B) provides that a payment made or received by an issuer to terminate a qualified hedge is treated as a payment made or received on the hedged bonds. Payments include loss or gain realized or deemed realized. The payment is reasonably allocated to the remaining periods originally covered by the terminated hedge in a manner that reflects economic substance of the hedge.

Example

Issuer has entered into a cap with respect to its floating rate bonds. The strike rate under the cap is 6.5%. The interest rate for similar instruments as the bonds go above 6.5% and

Accounting Rules for Qualified Hedges - continued

the Writer wants to terminate the cap because the periodic payments made by issuer are far less than the Writer would receive in the current market. The Writer pays issuer \$X as termination payment. The issuer must include the \$X in computing the yield on the bonds.

Special Rule When Bonds Are Redeemed

Treas. Reg. section 1.148-4(h)(3)(iv)(C) provides that when the contract is deemed terminated due to redemption of the hedged bonds, the fair market value of the qualified hedge on the redemption date is treated as a termination payment.

Any payment or deemed payment received upon redemption reduces, but not below zero, the interest payments made by the issuer on the hedged bonds in the computation period ending on the termination date.

The remainder of the payment, if any, is allocated over the bond years in the immediately preceding computation period or periods to the extent necessary to eliminate the excess.

Example

County W issues \$100M principal amount of fixed rate bonds on January 1, 1999. The term of the bonds is 20 years. The interest rate on the bonds is 6%. County W enters into a 20-year swap agreement with Broker X on the issuance date. Under the swap agreement, County W agrees to pay Broker X a variable rate, based on the *PSA Municipal Bond Index*, on \$100M notional principal amount. Broker X agrees to pay County W 6% on the notional principal amount.

On June 1, 2002, the long-term fixed rates for comparable obligations have dropped to 5%. Broker X wants to terminate the swap agreement. County W and Broker X agree to do so if Broker X pays County W a termination payment. The termination payment is taken into account in reducing the yield on the bonds.

Special Rules For Refundings

Treas. Reg. section 1.148-4(h)(3)(iv)(D) provides that if the hedged bonds are redeemed using refunding bond proceeds,

Accounting Rules for Qualified Hedges - continued

the termination payment is accounted for by treating it as a payment on the refunding issue, rather than the hedged bonds.

Safe Harbor for Allocation Of Certain Termination Payments Accordi

According to Treas. Reg. section 1.148-4(h)(3)(iv)(E), a payment to terminate a qualified hedge does not result in the hedge failing to satisfy the general allocation rules for termination payments if:

- For a <u>variable yield issue</u>, a termination payment is taken into account as if it were a series of payments allocated to each date on which the hedge provider's payments would have been made, where the amounts allocated to each date bear the same ratio to the notional principal amount that would have been used to calculate the hedge providers payment on such date. The sum of the present values of the deemed payments must equal the present value of the termination payment, as of the termination date. The discount rate used to calculate the present values is the yield on the bonds determined without regard to the termination payment for the period that the swap was in effect.
- For a <u>fixed yield issue</u>, a payment is taken into account as a single payment when made.

Certain Variable Yield Bonds Treated as Fixed Yield Bonds

Introduction

If the issuer of variable yield bonds enters into a qualified hedge, the hedged bonds are treated as fixed yield bonds if the requirements in the following sections are met.

Maturity

Treas. Reg. section 1.148-4(h)(4)(i)(A) provides that:

- the term of the hedge is equal to the entire period during which the hedged bonds bear interest at variable interest rates, AND
- the issuer does NOT reasonably expect that the hedge will be terminated before the end of that period.

Payments Closely Correspond

Treas. Reg. section 1.148-4(h)(i)(B) provides that payments to be received under the hedge must correspond closely in time to the hedged portion of payments on the hedged bonds.

Hedge payments received within 15 days of the related payments on the hedged bonds generally so correspond.

Aggregate Payments

Fixed

Under Treas. Reg. section 1.148-4(h)(i)(C), after taking into account all payments and receipts under the hedge and all payments on the hedged bonds, the issuer's aggregate payments are fixed.

Such payments must be determinable no later than 15 days after the issue date of the hedged bonds.

Accounting

Treas. Reg. section 1.148-4(h)(4)(ii) provides that in determining yield on the hedged bonds, all of the issuer's payments on the hedged bonds and all payments made and received on the hedge are taken into account.

If payments on the bonds and payments on the hedge are based on variable interest rates that are substantially the same, the issuer may treat the variable interest rates as identical when calculating yield on the issue.

Certain Variable Yield Bonds Treated as Fixed Yield Bonds - continued

For example, assume that bonds bear interest at a variable rate determined weekly to permit the bonds to be remarketed at par. The issuer hedges the bonds wherein the issuer receives payments based on a short-term floating rate index which is substantially the same as, but not identical to, the weekly rate on the bonds. For purposes of calculating the yield on the bonds, the interest payments on the bonds are treated as equal to the payments received by the issuer under the swap.

Termination

According to Treas. Reg. section 1.148-4(h)(3)(iv), the issue of which the hedged bonds are a part is treated as if it were reissued as of the termination date of the qualified hedge for purposes of calculating yield on the hedged bonds for purposes of section 1.148-3.

The redemption price of the retired issue and the issue price of the new issue equal the aggregate values of all of the bonds of the issue on the termination date.

In computing the yield on the new issue, the termination payment is treated as if made and received on the new issue. Such payment is accounted for under Treas. Reg. section 1.148-4(h)(3)(iv).

Early Termination

Treas. Reg. section 1.148-4(h)(4)(iii)(B) provides that the general rules of paragraph (h)(4)(i) do not apply if the hedge is terminated or deemed terminated within five years after the issue date of the issue of which the hedged bonds are a part. However, this rule only applies for rebate purposes under Treas. Reg. section 1.148-3, and NOT for yield restriction purposes.

Therefore, the bonds are treated as variable yield bonds from the issue date for purposes of section 1.148-3.

Certain Terminations

Disregarded

According to Treas. Reg. section 1.148-4(h)(4)(iii)(C), the issuer may disregard the termination, if based on the facts and circumstances (taking into account both the termination and

any qualified hedge that immediately replaces the qualified hedge) there is no change in yield on the hedged bonds.

For example, this provision would apply if the issuer terminated a swap with a provider and replaced it with a substantially identical swap with a different provider. This might occur if the original swap provider and its credit rating were downgraded.

Anticipatory Hedges

General

Treas. Reg. section 1.148-4(h)(5)(i) provides that a contract does not fail to be a hedge under Treas. Reg. section 1.148-4(h)(2)(i) solely because it is entered into before the issue date of the hedged bond. However, the contract must meet one of the two categories described below.

A forward swap or swaption is an example of an anticipatory hedge.

Hedges Expected to Close Near the Issuance Date

Under Treas. Reg. section 1.148-4(h)(5)(ii), the issuer must reasonably expect to terminate the contract substantially contemporaneously with the issue date of the hedged bonds.

The amount paid or received, by the issuer in connection with the issuance of the hedged bonds to terminate the contract is treated as an adjustment to the issue price of the hedged bonds. It is also treated as an adjustment to the sale proceeds of the hedged bonds.

The amounts paid or received, or deemed paid or received, before the issue date are treated as paid or received on the issue date. Such amounts are equal to the future value of the payment or receipt on that date, using the yield on the bonds without taking into account any amounts paid or received (or deemed paid or received) on the contract.

Treatment as Fixed Rate Bonds

Treas. Reg. section 1.148-4(h)(5)(ii)(E) provides that the hedged bonds covered by an anticipatory hedge are treated as fixed yield bonds if, taking into account payments under the contract and payments to be made on the bond, the bond satisfies the definition of the fixed yield bond.

Anticipatory Hedges - continued

Hedge Not Expected to Close Near the Issuance Date

Treas. Reg. section 1.148-4(h)(5)(iii) applies if the issuer does not expect to close the hedge in connection with the issuance of the bonds.

If the contract is in fact not terminated substantially contemporaneously with the issue date of the hedged bonds, no payments made by the issuer before the issue date are taken into account. The payments and receipts under the hedge are, however, taken into account under the general rules.

If the contract is terminated in connection with the issuance of the hedged bonds, the amounts paid or received, or deemed to be paid or received, is treated as an adjustment to the issue price of the hedged bonds. It is also treated as an adjustment to the sale proceeds of the hedged bonds.

Identification

Treas. Reg. section 1.148-4(h)(5)(iv) provides that the identification required under paragraph (h)(2)(viii) must specify the following with respect to the hedged bonds:

- reasonably expected governmental purpose,
- issue price,
- maturity, and
- issue date.

It must also identify the manner in which interest is reasonably expected to be computed and how the anticipatory hedge meets the requirements of the regulations. If an issuer identifies a contract that would be a qualified hedge with respect to anticipated bonds, but does not issue the bonds, the contract is taken into account as a qualified hedge of any bond of the issuer that is issued for the identified governmental purpose within a reasonable interval of the identified issue date of the anticipated bonds.

Anticipatory Hedges – continued

Commissioner's

Discretion

Under the general anti-abuse rule provided in Treas. Reg. section 1.148-10(e), the Commissioner may take into account the economic substance of a transaction in determining whether to treat a hedge as a qualified hedge.

SECTION 4

Debt/Equity Considerations

Introduction

This section discusses the characteristics of debt instruments and various types of interest rate setting mechanisms for taxexempt debt instruments.

Tax-exempt Debt

The interest on a tax-exempt debt instrument is excluded from gross income of the holder if the instrument meets the requirements of sections 103, 141-150 of the Code. Thus, the holder may exclude amounts received on an instrument that purports to be tax-exempt if:

the amount received is "interest", and

the instrument is "debt" of the issuer.

Classification of an instrument as debt or equity has been a problem because of the absence of clear-cut rules and application of subjective criteria.

Additionally, for the interest on the tax-exempt instrument to be excludible from gross income under section 103(a), the instrument must be debt and issued pursuant to the borrowing power of the issuer.

Example

The simplest example of debt is – Bank loans \$1 Million to Corporation and Corporation issues a note to Bank. The note is payable in 10 years and bears interest at 7%. The note is debt of the Corporation. Corporation is the debtor and Bank is the creditor.

Code and Regulations

Neither the Code nor the regulations provide when an instrument is considered debt rather than equity. The Service has published and withdrawn proposed and final regulations discussing characteristics of debt instruments.

Section 385(b) of the Code provides that certain factors may be considered in making a determination whether a debtorcreditor relationship exists.

Section 385(c) of the Code provides that the issuer's determination of the character of an instrument is binding upon the holder. Although the parties are bound by the issuer's determination, the Service is nevertheless free to disregard the issuer's determination

Notice 94-47

The Service issued and withdrew regulations under section 385(c). After withdrawing the regulations, the Service published Notice 94-47, 1994-1 C.B. 357.

Notice 94-47 provides that the characterization of an instrument as debt or equity depends upon the terms of the instrument and all surrounding facts and circumstances. Some of the factors provided in Notice 94-47 in making such determination are discussed below.

Judicial Factors

The courts have often ruled on whether a particular instrument is debt or equity and have relied upon certain factors in making such rulings. Although no uniform standards have been set by the courts, the factors enunciated by the courts must also be taken into account along with the factors discussed in Notice 94-47. The goal in applying the factors is not to count how many factors fit, but to determine the intent of the parties in structuring the instrument in a certain manner and the economic realities. Generally, speaking, instruments that bear too great a risk of repayment to the holder resemble equity more than debt.

Factors

Some of the factors (listed in Notice 94-47 and in case law) in making such determination include, but are not limited to, the following:

- Name given to the instrument;
- Whether there is an unconditional promise to pay on demand or on a specified date the principal of the instrument;

- Whether the maturity date of the instrument is unreasonably long.
- Whether the holder of the instrument can enforce payment of principal or interest against the obligor;
- Adequacy and certainty of income;
- Whether the other creditors of the obligor are subordinated to, or preferred over, the holder of the instrument;
- Whether there is a relationship between the holders of the equity in the obligor and the holders of the instrument in question;
- The ratio of debt to equity of the obligor.

No particular factor listed above is conclusive in making the determination whether an instrument is debt or equity. The weight to be given to any factor depends upon the facts and circumstances, and the overall effect of an instrument's debt and equity features must be taken into account.

Name Given By Parties

The simplest and clearest factor is the name given to the instrument by the parties. If the issuer calls an instrument "stock," one would presume the intent to issue an equity interest to the holder. On the other hand, issuance of a "bond" or "note" connotes the intent to issue debt to the holder. Because the goal is to determine the economic substance of the transaction, this factor is simply the starting point of the inquiry.

Unconditional Promise to Pay

The unconditional obligation to pay the holder of the instrument and the ability of the holder to reasonably expect repayment are important factors in classifying an instrument as debt.

The absence of a maturity date or a payment on demand feature suggests that the holder intends to make a permanent investment in the obligor.

If the instrument does not have a maturity date, the question also arises whether the issuer has an unconditional obligation to pay the principal of the instrument.

If the instrument does not have a fixed maturity date but the issuer has a right to redeem the instrument and has the financial ability to undertake such a redemption (such as a guarantee by a third party or a line of credit), the instrument has debt characteristics.

Maturity is Too long

A fixed maturity date does not have much meaning if such date is not in a reasonable period of time. A holder of a debt instrument reasonably expects to receive its principal back within a reasonable period of time. A determination whether the maturity is too far in the future must be made based on all of the facts and circumstances.

Examples

Example 1. In 1998 the issuer issues a note on which it is unconditionally liable to pay the principal (\$1 Million) to the holder. The note bears interest at a fixed rate of 5% accruing annually. The maturity date is June 1, 2048.

Example 2. In 1998 the issuer issues a note on which it is unconditionally liable to pay the principal (\$1 Million) to the holder. The note bears interest at a variable rate based on an index. The note has no maturity date but the holder can put the note to the issuer at anytime after 10 years.

Example 3 In 1998 the issuer issues a note which provides that the issuer is unconditionally obligated to pay the principal (\$1 Million) on June 1, 2008. The note will bear interest at a fixed rate of 5%. However, at the option of either of the issuer or the holder the issuer may extend the maturity for additional ten-year periods.

What additional facts in the above examples, if known, would make a difference in your determination as to the classification of the instrument as debt or equity?

Enforceability By Holder

Whether the holder of the instrument has the ability to enforce the obligation of the obligor is important. Although the obligor of the instrument may have an unconditional obligation to repay the principal of the instrument to the holder, if the holder cannot enforce such obligation, the unconditional obligation is meaningless.

If, for example, in the event of default of a scheduled interest or principal payment on the note, the holder has no recourse, a question arises whether the instrument should properly be characterized as debt.

Generally, creditors are provided a mortgage or security interest on certain assets and/or revenues of the obligor (especially in case of tax-exempt bonds, the bondholders are secured parties). In the event of nonpayment, the creditor can enforce the debtor's obligation by foreclosing on the mortgage or security interest. However, a security interest in and of itself may not carry much weight if the security interest is inadequate or the holder cannot enforce its security interest.

An example of an inadequate security interest maybe where the instrument requires no sinking fund redemptions and/or the interest accretes to the point that the stated redemption price at maturity is so large that there is no expectation of repayment by the creditor.

Even if the creditor does not have a security interest in any property of the debtor (an unsecured creditor), such creditor can pursue a claim in bankruptcy court. In contrast, a shareholder (other equity holder) cannot require payment by the issuer of the instrument or pursue a claim in bankruptcy court.

Examples

Example 1. Issuer issues an instrument with a face amount of \$1 Million. The holder will receive interest in the amount of \$600 per year. The maturity date of the instrument is 10 years.

Example 2. Issuer issues a bond at an issue price of \$1 Million. The maturity date of the bond is 25 years after the issue date. The stated redemption price at maturity of the bond is \$10 Million. The issuer of the bond is an entity that provides housing for low-income persons. The bondholder has a lien on the facility.

Example 3. Issuer, a single-purpose corporation, issues a note with a face amount of \$10 Million. The note provides that the holder will receive \$500,000 on each July 1 until the note is redeemed by the issuer at a redemption price of \$10 Million. The note does not have a set redemption date. The note is secured by the revenues of the issuer. The purpose of the issuer is to own and operate a nursing home. The holder has a lien on the assets of the issuer.

Example 4. In Example 3, the issuer is large university system described in section 501(c) (3) of the Code.

What additional facts in the above examples, if known, would make a difference in your determination as to the classification of the instrument as debt or equity?

Adequacy and Certainty of Income

The holder of a debt instrument expects to receive interest on the funds loaned to the debtor. The interest is generally based on prevailing market rates and represents the time value of money. Whereas, a person having an equity interest in an enterprise seeks to profit from the success of the enterprise. The return to such holder is not certain and may not be adequate, if the enterprise is not successful.

If the instrument provides for no interest or interest far below or above the prevailing market rate(s), the instrument resembles equity rather than debt.

A debt instrument generally as a certain rate of return based on the time value of money. The debtor is required to pay interest to the holder regardless of the success or failure of the enterprise. On the other hand, an equity holder generally

wants its return to be based on the success of the enterprise. The more successful the enterprise, the greater the return. In other words, the holder of a debt instrument counts on the certainty of the income to be received. However, the fact that the return is based on the revenue of the enterprise does not necessarily make the instrument equity. See, Section 5 – Contingent Payment Debt Instruments.

Examples

Example 1. The issuer issues a note in the face amount of \$10 Million payable 10 years after the issue date. The note will bear interest at 3%. On the date of issue, the prevailing interest rate for similar instruments is 7%.

Example 2. The issuer issues a certificate in the face amount of \$10 Million. The issuer provides to the holder that the return on the note will be determined by the board of directors of the issuers at its annual meeting. The issuer is unconditionally obligated to pay the \$10 Million to the holder and such obligation is secured by a stand-by letter of credit issued by an unrelated bank.

Example 3. Issuer issues a certificate that is secured by a mortgage on the manufacturing facility owned and operated by the issuer. The note is due 7 years after the issue date. There are no sinking fund redemptions. Interest on the note is paid semi-annually in an amount equal to 7% of the gross revenues of the facility.

Subordination

Generally, the holder of a debt instrument of an issuer has rights superior to those of persons having equity in the issuer. Thus, in the event of default, the creditor (and other creditors) has a right to the assets of the issuer that is superior to the holders of an equity interest in the issuer.

However, one creditor may be subordinate to another creditor(s) without such creditor's interest being treated as equity. But if a creditor is subordinated to the extent that the possibility of repayment is remote, then the creditor's interest maybe more akin to equity.

Example

Issuer borrows moneys from a related entity X and issues a note to X that is payable 5 years after the issue date of the note. The issuer and X can agree to defer the payment on the note as long as X receives an annual interest payment based on a 10 % interest rate. The issuer has previously issued debt to other creditors and such prior debt is secured by the assets and revenues of the issuer. The note to X provides that the issuer is unconditionally obligated to pay the note after the senior lien creditors and the general unsecured creditors have been paid.

How would you resolve whether the instrument is debt or equity?

Relationship Between Debtor And Creditor

If there is a relationship between the holder of the instrument and the issuer, the instrument may be equity. This is because shareholders generally have a right to participate in the management of the enterprise where as debtors generally do not.

The presence of this factor is not materially significant because often creditors require some control over the creditor's ability to run its business. For example, a bank may restrict the debtor from incurring additional secured debt, sell assets, or require review of the debtor's budgets.

If the holder of the debt instrument is the manager of the enterprise, in determining whether the instrument is debt or equity, it is important to review the methodology for determining the management fee and the interest on the instrument. If payment of one is related to the payment on the other, the instrument may be equity.

Example

Issuer issues a note in the face amount of \$5 Million to Manager. The annual management fee is equal to 10% of the gross revenues of the facility. The note provides that if the Manager receives less than \$250,000 each year, the interest rate on the note will be 7%, however, if the Manager receives

more than \$250,000 in fee, the interest rate on the note will be 5%.

What if the Manager owns 10% of the stock of the Issuer?

Debt/Equity Ratio

The adequacy of the capital structure of the issuer at the time the instrument is issued is an important factor in determining whether the instrument is debt or equity. A person issuing debt to a thinly capitalized corporation bears greater risk than a person issuing debt to an adequately capitalized corporation. Thus, the debt-equity ratio of a debtor can provide an indication whether there is reasonable expectation of payment.

However, capitalization is just one of the factors to be considered. This factor must be weighed against the general norm in the applicable industry and the character of the business. For example, a start-up single purpose corporation may have a high debt to equity ratio but the creditor may have an enforceable claim against the debtor and reasonable assurance that the debt will be paid on the maturity date (e.g., bond insurance, guarantee, or other credit enhancement). This is often the case with respect to new money bond financings for a single purpose entity.

On the other hand, the ratio of debt to equity is often raised in connection with a work-out situation where the debtor has been unable to pay on the debt and is trying to restructure the debt. In such situations the debt/equity ratio becomes an important factor.

Why does it Matter?

The tax consequences to the holder and the issuer of the debt instrument are quite different than to a holder and the issuer of an instrument that is characterized as equity. The tax consequences become especially relevant where the debt instrument qualifies under section 103 of the Code.

The receipt of proceeds of a debt instrument by the issuer of the instrument is not a taxable event because the issuer has the liability to repay the amount. However, if the issuer

receives premium on the issue date the issuer has taxable income with regard to the premium. The issuer can generally deduct the interest paid to the holder of the debt instrument.

If the instrument is determined to be equity, the issuer's interest deductions will be lost.

From the holder's perspective, the interest on a taxable debt is included in income. However, if the instrument qualifies under section 103, the interest is excludible from gross income.

The notional principal contracts described in Section 1 are not considered debt of either of the counterparties. Thus, even if an issuer makes "interest payments" with respect to such contract to the other counterparty, such payments are not excludible "interest" for purposes of section 103 of the Code.

SECTION 5

Interest

Introduction

Amount paid by the borrower to the lender as compensation for the use of borrowed money.

Interest on a debt instrument may be at a fixed rate, variable rate, inverse floating rate, or contingent rate.

This Article does not include a detailed discussion of the rules applicable to OID, variable rate debt instruments and contingent payment debt instruments. This Article provides a short summary of these rules so that the agent can identify that the debt instrument under audit is an OID instrument, a variable rate debt instrument or a contingent payment debt instrument. If the agent has additional questions regarding these rules or other issues discussed in this section, the agent should contact the National Office.

Original Issue Discount

General

The rules regarding original issue discount (OID) determine the amount of interest paid on a debt instrument. Under the OID rules, amounts paid as principal may be recharacterized as interest. The OID rules are included in sections 1271-1275 of the Code and the regulations thereunder. In addition to determining the amount of interest, the rules also provide the timing of when such interest is deemed to accrue for tax purposes.

OID Defined

Stated Redemption Price of the instrument over its Issue Price

Stated Redemption

Price at

Maturity

The sum of all payments to be received on the instrument less any Qualified Stated Interest.

Issue Price

As defined in Treas. Reg. § 1.148-1(b).

Qualified Stated Interest

Interest that accrues at

- A fixed rate and that is
- Unconditionally payable at fixed periodic intervals of 1 year or less
- During the entire term of the instrument.

Examples

Example 1. A zero coupon bond having an issue price of \$3,000,000 and maturing at \$30,000,000 is issued at a discount and thus is an OID debt instrument. The stated redemption price at maturity is \$30,000,000. Interest rate is zero so there is no qualified stated interest.

Example 2. Debtor issues a note having an issue price of \$825 bearing interest at 10% and maturing in 2 years. The interest accrues semiannually. The lender will receive \$175 in interest during the 2 years and will receive \$825 at maturity. Debtor could also issue a note to lender having an issue price of \$825 with no interest payments but the note

Original Issue Discount - continued

matures \$1,000. The economic result to the lender and debtor is the same. Lender received \$175 in interest.

Why Does It Matter

The question in the above example is when should the lender accrue and be taxed on the \$175 it receives from the note that has OID. The OID rules not only determine the amount of interest on the instrument but the timing of the accrual. The timing rules determine when the lender must include the interest in income and also when the debtor can take an interest deduction.

OID Rules

Other than for certain exceptions, OID rules affect all debt that is issued at a discount, including debt that provides for

- Deferred payments of interest
- A variable rate of interest, or
- Contingent payments

Exceptions

In addition to several other exceptions, OID rules do not apply to tax-exempt bonds that meet certain specific requirements in the regulations.

Why Should a TEB Agent Care

Calculation of OID requires determination of the qualified stated interest. However, interest may not be unconditionally payable if the payment of the interest on a debt instrument is contingent on something happening.

As stated above, OID rules generally do not apply to tax-exempt obligations. However, if the contingent payment debt instruments do not meet specific requirements under Treas. Reg. § 1.1275-4(d), a portion of the interest on the bonds may be taxable. Accordingly, an agent examining a bond issue, the interest on which is contingent upon certain events, needs to be aware of the basic requirements under Treas. Reg. § 1.1275-4(d).

Types of Interest Rates

Generally Interest on a debt instrument can be based on a fixed rate, a

variable rate or contingent payments.

Fixed Rate A debt instrument bears interest at a fixed rate if the rate on

the instrument, from the issue date to its stated maturity date,

is fixed and determinable on the issue date.

Variable Rate For purposes of section 148, a debt instrument that does not

have a fixed yield is considered a variable yield debt instrument. However, for all other purposes, to determine whether an instrument is a variable rate instrument section

1275 of the Code applies.

Under section 1275, a variable rate debt instrument (VRDI) must meet certain requirements to qualify as a VRDI. Generally, the instrument must meet four tests provided in subsections (2), (3), (4) and (5) of section 1.1275-5(a). If the requirements of these sections are not met, the debt

instrument may not qualify as a VRDI. If a debt instrument is not a fixed rate instrument or a VRDI, it is a contingent

payment instrument.

Contingent Payment

Debt Instrument Neither the Code nor the regulations define contingent

payment debt instrument.

The regulations list several situations where a debt instrument is not considered a contingent payment debt instrument and is

not subject to Treas. Reg. § 1.1275-4.

Tax-exempt **Obligations**

Generally, the contingent payment regulations limit the interest payment that may be excludable from gross income of the holder. Thus, the rules in Treas. Reg. § 1.1275-4(d) generally operate to restrict the yield on tax-exempt obligations to the tax-exempt AFR that applies to the obligation. However, the regulations provide that two categories of tax-exempt obligations are not subject to the limitations

Types of Interest Rates – continued

<u>Interest-based payments</u>. Tax-exempt obligations that have interest-based payments are not subject to the limitations described above. A tax-exempt obligation provides for interest-based payments if it would otherwise qualify as a VRDI except that

- It provides for more than one fixed rate;
- It provides for one or more caps, floors, or similar restrictions that are fixed as of the issue date;
- The interest on the obligation is not compounded or paid at least annually; or
- It provides for interest at one or more rates equal to the product of a qualified floating rate and a fixed multiple greater than zero and less than .65, or at one or more rates equal to the product of a qualified floating rate and a fixed multiple greater than zero and less than .65, increased or decreased by a fixed rate.

See Treas. Reg. § 1.1275-4(d)(2)(ii).

Example 1. A note that has interest payable monthly and the interest is based on the JJ Kenny Index but is in no event greater than 3.5% is an interest-based contingent payment debt instrument.

Example 2. A note having a term of five years that states that the interest rate for the first year shall be based on the JJ Kenny Index plus 40 basis points and thereafter it will be a fixed rate to be determined on the first anniversary of the issue date is an interest-based contingent payment debt instrument.

Revenue-based payments. Tax-exempt obligations that have revenue-based payments are not subject to the limitations described above. A tax-exempt obligation provides for revenue-based payments if —

• It is issued to refinance (including a series of refinancings) obligations, the proceeds of which were used o finance a project or enterprise; and

Types of Interest Rates – continued

• It would otherwise qualify as a VRDI except that it provides for stated interest payments at least annually based on a single fixed percentage of the revenue, value, change in value, or other similar measure of the performance of the refinanced project or enterprise.

Example 1. Issuer issued bonds in 1989 to finance a project. In 1999, the issuer issued bonds to refinance the 1989 bonds. The interest on the 1999 bonds is determined yearly and is equal to 5% fixed interest rate plus 10% of the gross revenue generated by the project during the prior fiscal year; provided, however, the cumulative payment each year shall not exceed an amount that would produce a yield of 15%. The 1999 bonds are revenue-based contingent payment debt instruments.

Example 2. Same as Example 1 except that the interest on the 1999 bonds is determine annually and is based solely on 50% of the increase in gross revenues of the project during the prior fiscal year over the previous fiscal year, with an annual yield not to exceed 15%. The 1999 bonds are revenue-based contingent payment debt instruments.

Example 3. Same as Example 1 except that the interest on the 1999 bonds is determined annually and is based on 5% fixed rate plus 10% of the net revenues of the corporation that owns the project. The corporation owns four other enterprises that were not financed with the 1989 bonds. The 1999 bonds are not revenue-based contingent payment debt instruments.

SECTION 6

Tax-exempt Primary Market Derivative Products

Introduction

A derivative is a financial product that derives its value from another instrument.

A primary market derivative is a derivative that is part of a debt instrument issued by the state or local government. The interest on the tax-exempt primary market derivative product is generally excludible from gross income if it meets the requirements of section 103, 141-150 of the Code. However, specific federal tax issues apply to tax-exempt primary market derivative products, such as the OID rules discussed in the prior Section.

This Section solely discusses the structure of tax-exempt primary derivative products and does not provide a detailed description of federal tax laws applicable to such products. An agent examining a bond issue that includes such product(s) should contact the National Office.

Tax-exempt Primary Market Derivatives – continued

Floating Rate Bonds

Interest on floating rate debt instruments is derived from an objective index selected on the issue date by the debtor and the creditor. The rate may be based on LIBOR, *the PSA Municipal Bond Index*, *the BMA Index*, or another floating rate index commonly used in the market.

Inverse Floating Rate Bonds

An inverse floating rate bond is a bond that derives its interest rate from an objective floating index. The interest on an inverse floating rate instrument moves inversely with prevailing interest rates. If the interest rates go up, the rate on an inverse floating rate instrument go down. Although the formula for determining the rate on the inverse floating rate bond is complex and takes into account a number of fees (such as auction agent's fee) the following example provides a simplistic structure of the two bonds.

City issues an inverse floating rate bond in the principal amount of \$100. The issuer sets a ceiling rate of 10% and provides that the inverse floating rate bond will derive its rate from the *PSA Municipal Bond Index*. Assume that during the 30-day period (the interest period on the bond), the interest rate on the *PSA Municipal Bond Index* was 4.5%. The interest rate on the inverse floating rate bond during that period would be 5.5% (10% minus 4.5%). If the floating rate is 7.5%, the inverse floating rate would be 2.5%. Thus, the lower the floating rate, the higher the inverse floating rate and *vice versa*.

Floater/Inverse Floater

An inverse floating rate bond may be "linked" to a floating rate bond that is simultaneously issued by the issuer and derives its interest rate from the floating rate bond (e.g., some fixed rate amount of interest less the amount paid to the floater). Where an inverse floating rate bond is issued simultaneously with a floating rate bond, the holder of the floating rate bond receives interest at the floating rate and the holder of the inverse floating rate bond receives the differential. However, the calculation of the interest rates is

Tax-exempt Primary Market Derivatives – continued

somewhat different than in the above example. Again, assume that City issues \$200 principal amount of bonds having a fixed rate of 6%. The City issues \$100 principal amount of the bonds as floating rate bonds and the other \$100 as inverse floating rate bonds. The interest is payable semiannually. If the objective floating index during an interest period is 4%, the holder of the floating rate bond will receive \$2 (i.e., 4% of \$100 divided by ½). The holder of the inverse floating rate bond will receive \$4. This is because the two bonds are linked and the issuer pays a total of \$6 (i.e., 6% of \$200 divided by ½) as interest for the six month interest period and after paying the floating rate bond holder \$2, the remaining \$4 in interest is paid to the inverse floating rate bond holder.

Mechanics of A Dutch Auction

In the above examples the floating rate on the bonds is based on an objective index (or a lowest rate determined by the remarketing agent to sell the bonds at par). In a number of instances the floating rate may be determined pursuant to a dutch auction.

On each auction date a holder of the floating rate bonds informs the auction agent that it wants to do one of the following:

sell its bond, hold its bond, or sell only if the new interest rate is set below a certain rate.

The auction agent also receives request from potential purchaser(s) that such purchaser(s) want to do one of the following:

purchase at whatever rate is set, or purchase only if the new rate is above a specified rate.

On the auction date, the auction agent matches the sell and purchase requests. After the auction is completed, a uniform

Tax-exempt Primary Market Derivatives – continued

rate is set for all of the floating rate bonds for the next interest period. This rate is the minimum rate necessary to match the "specified rate sell" requests and "specified rate purchase" requests (described above). If the matching does not happen, the interest rate on the floating rate bonds during the next interest period is based on a back-up formula provided by the issuer on the issue date, e.g., an objective tax-exempt bond index. The failure to set an auction rate is called a "failed auction."

Dutch Auction Bonds

Floating rate dutch auction bonds may be issued with or without a simultaneous issuance of inverse floating rate bonds

By issuing dutch auction bonds rather than floating rate demand bonds the issuer need not provide a liquidity facility for the bonds. This is because unlike floating rate demand bonds, dutch auction bonds can only be sold at an auction to another bondholder rather than put to the issuer. The downside for the issuer is that if there is a failed auction, the rate on the bonds may be higher than the rate on a floating rate demand bond.

Detachable Call Bonds

Section 2 describes detachable call bonds. Although Section 2 discusses detachable calls sold after the issuance of the original bonds, an issuer may sell the call right to a third party on the date of issuance of the bonds.

SECTION 7

Tax-exempt Secondary Market Derivative Products

Introduction

Secondary market derivatives are not directly issued by the state or local government. Such products derive their taxexempt status from tax-exempt obligations issued by a state or local government.

Strips

By creating a strip, the holder of the bond separates the right to receive principal from the right to receive interest. The holder of a bond sells one or more interest payment streams or an interest payment for a specific date to another party. The purchaser of the strip purchases the strip at a discount. A Strip is an OID instrument.

Example. Holder owns a bond that pays interest semiannually on each January 15 and July 15 at a fixed rate. On January 1, 2002, the Holder sells the interest payment due on July 15, 2005, to Purchaser. The interest due on July 15, 2005, is \$220. Purchaser pays \$200 to the Holder. As a result of the sale Holder receives \$200 on January 1, 2002, rather than \$220 on July 15, 2005, and Purchaser's yield on the strip is 2.75% per annum (assuming semiannual compounding). If the bond is tax-exempt, the amount received by Purchaser will generally be tax-exempt, but only to the extent that the yield to the Purchaser does not exceed the greater of the interest rate on the underlying bond or the original issuance yield of the bond. Purchaser is in essence purchasing a zero coupon instrument.

Treasury notes and Treasury bonds that have a maturity date of at least ten years can be striped and sold as separate securities. Treasury instituted this program in 1985. The strips are traded in the secondary market and cannot be purchased from the Treasury.

Section 1286 includes rules applicable to stripped bonds or stripped coupons. Such rules are not within the scope of this Article and not discussed herein. The agent should contact the National Office in the event of questions.

Senior Subordinate

Grantor Trust

A senior subordinate grantor trust consists of two classes of certificates issued by the grantor trust where the corpus of the trust is a portfolio of fixed rate municipal bonds. The sponsor of the trust deposits a portfolio of fixed rate tax-exempt bonds into the grantor trust. The trust has two classes of beneficiaries – (i) Class A that have a percentage interest in the trust and thus receives that same percentage of the principal and interest due on the fixed rate bonds and (ii) Class B that have the remaining percentage interest in the trust and receive the remaining principal and interest on the fixed rate bonds. The beneficiaries receive certificates that are referred to as Class A Certificates and Class B Certificates. The Class A Certificates are senior to the Class B Certificates. The sponsor of the trust may hold the Class B Certificates.

Example 1. State issues \$10 Million principal amount of bonds having a yield of 8%. On January 1, 2002, Corporation purchases the entire principal amount of the bonds. Corporation establishes a grantor trust and deposits the bonds into the trust. The trust issues two classes of certificates to investors. Class A Certificates consist of 80% of the interest in the trust and are sold at a premium (\$X) to produce a yield of 6%. The Class B Certificates represent the remaining interest in the trust (20%) and receive the remaining principal and interest payment on the portfolio of bonds. Corporation is the holder of the Class B Certificates.

The interest on the Certificates is paid every six months and the principal is paid yearly and these payments correspond with the payment of interest and principal on the fixed rate bonds. Assume that on June 1, 2003, the trust receives \$400,000 as an interest payment on the bonds. The trust will pay \$320,000 to Class A Certificate holders (80%) and \$80,000 to Class B Certificate holder (Corporation). If there is an event of default on the underlying bonds and the trust only receives a partial payment, the Class A Certificate holders receive their payment first and any shortfalls are borne by the Class B Certificate holders.

Example 2. Instead of selling the Class A Certificates at a premium that is priced to yield 6%, such Certificates could be sold at par but with a pass through interest rate of only 6% per annum (i.e., \$300,000 of interest every 6 months). In this case, the Class B Certificate would consist of two parts: (i) \$2,000,000 of principal that pays 8% interest per annum and (ii) a 2% per annum interest only strip on \$8,000,000. See discussion above of the treatment of strips.

Serializing of Term Bonds

Generally, the holder of a term bond, that has sinking fund redemptions, receives annual principal payments and semiannual interest payments on the bonds. The rate at which each interest payment is made by the issuer is the same during the entire term of the term bond and is fixed on the date of issue of the bond but the actual interest payments reduce as the principal amount of the bond reduces. The holder of the term bond can create a partnership and transfer the term bond to the partnership. Interests in the partnership are subsequently sold to investors. The interest of each investor in the partnership consists of one of the annual principal payments on the term bond and the semiannual interest payment associated with such principal on each interest payment date. Investors therefore purchase interests in various sinking fund maturities of the term bond.

Thus, the holder of the term bonds has created serial bonds the maturity of which corresponds with the sinking fund redemption payments on the term bond.

Example. Corporation owns a fixed rate municipal bond in the principal amount of \$10 Million that matures on July 1, 2015 with a yield of 7%. The issuer will make a sinking fund payment in the amount of \$1 Million on each July 1 starting July 1, 2006 until 2015. The issuer will also make a semiannual interest payment on the bond on each January 1 and July 1. Corporation establishes a partnership of which Corporation is the general partner. Corporation transfers the term bond to the partnership. The partnership sells 10 limited partnership interests and each limited partner purchases one of the following interests consisting of a stream of payments

(a principal payment and interest on such principal until the maturity of the specific interest payment):

<u>Principal</u>	Maturity Date
\$1 Million 1 Million	July 1, 2006 July 1, 2007 July 1, 2008 July 1, 2009 July 1, 2010 July 1, 2011 July 1, 2012 July 1, 2013
1 Million 1 Million	July 1, 2014 July 1, 2015

The yield on each "serial bond" created by the partnership varies and depends upon the market on the date the partnership interests are sold. However, the cumulative yield on all the serial bonds is less than 7%. The partnership, as the owner of the term bond, receives the principal and interest payments on the bond and distributes the payments to the particular investor to whom such principal and interest payments relate. Thus, each holder of a \$1 Million principal maturity will receive \$35,000 every January 1 and July 1 until, and including, the date of maturity of its 1 Million principal amount, at which time the holder will also receive the \$1 Million

Partnership With Floaters/ Inverse Floaters

The concept is similar to the senior subordinate grantor trust discussed above except that the certificates are sold as floaters/inverse floaters (discussed in Section 6) rather than senior and subordinate certificates. Instead of a grantor trust, a partnership structure is utilized.

Example. Corporation purchases \$10 Million principal amount of fixed rate bonds from issuer with a coupon of 6%. Corporation creates a partnership and transfers the bonds to the partnership. The partnership is the owner of the bonds.

The partnership issues two classes of certificates. Class A Certificates that bear interest at a variable rate determined weekly based on the BMA Municipal Bond Index. The Class A Certificates are tender option obligations and are subject to tender by their owner on any interest rate determination date. Because the Class A Certificates are tender option certificates, Corporation must also acquire a liquidity facility. Depending upon the credit quality of the underlying bonds, the partnership might also acquire a credit facility (e.g., bond insurance or letter of credit). Assume that Corporation pays a total of 0.5% per annum to the liquidity provider and credit provider. The Class B Certificates receive interest that is 6% less than the interest rate on the Class A Certificates and less the liquidity and credit fees. Although the interest on the bonds is paid semiannually, the passthrough of the interest to the Class A Holders is generally paid monthly (either by means of a diverse portfolio of bonds or through advances by the sponsor).

On June 1, 2003, the partnership receives \$300,000 as interest payment on the fixed rate bonds. The cumulative floating rate on the Class A Certificates during the prior six-month period is 2%. The Class A Certificate holders receive \$100,000. The Class B Certificate holder (Corporation) receives \$175,000. Corporation pays \$25,000 to the liquidity provider as the liquidity fee.

Because the partnership owns the tax-exempt bonds, the pass through interest paid on the Class A and Class B Certificates is also tax-exempt. If short-term interest rates go up, the Class A Certificates receive more interest and the Class B Certificates receive less interest and *vice versa*.

Pooling of Mortgages

Instead of stripping and selling interest coupons from individual bond, another financial product is created by "pooling" a number of bonds or debt instruments (e.g., mortgage notes) and issuing certificates that represent beneficial interests in the grantor trust that owns the pool of the debt instruments

Example. A mortgage lender creates a grantor trust and transfers 100 mortgage loans for which it is the lender to the trust. The trust issues and sell certificates representing beneficial interests in the trust. The certificate holders, as the beneficiaries of the trust, receive a proportionate share of the payments received by the trust on the mortgage loans (e.g., Fannie Mae, Freddie Mac, and Ginnie Mae certificates).

By creating the trust and transferring the mortgage loans, the mortgage lender receives the outstanding amount of the loans and can use the moneys to make additional loans. By purchasing beneficial interests in a pool of mortgages rather than an interest only strip for an individual loan, the investor reduces its risk of an individual mortgage default or prepayment.

If the corpus of a grantor trust is a pool of tax-exempt bonds, the pass-through interest received by the certificate holders will be exempt from tax if the grantor trust is properly structured.

Instead of structuring the above transaction as a grantor trust, the mortgage lender can also create a partnership and sell partnership interests to various investors that will receive the principal and interest payments.

There are numerous federal tax and securities law considerations that must be taken into account in determining whether the derivative that purports to be tax-exempt qualifies for such treatment. In addition, numerous state law issues may also apply. The purpose of this Article is solely to provide an overview of the structure of certain tax-exempt derivatives. If the agent has questions regarding the tax implications of owning or issuing such derivates, the agent should contact the National Office.